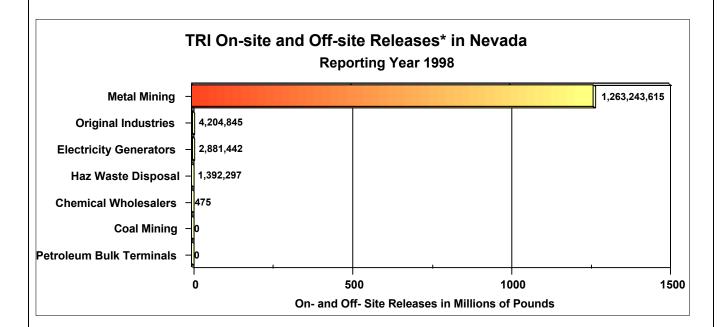


# Nevada Report: 1998 Toxics Release Inventory

U.S. EPA Region 9 Arizona, California, Hawaii, Nevada, and the Pacific Islands



#### The 1998 Public Data Release

EPA has just made public the 1998 data on toxic chemicals that were released to Nevada's air, water and land. This information comes from the Toxics Release Inventory (TRI) program, commonly known as community right-to-know. In addition to information from certain manufacturing facilities and from federal facilities, this marks the first year that data is available on seven new industry sectors. In Nevada, 95 facilities reported 1.27 billion pounds of toxic releases\*.

\* Release is defined as the amount of a toxic chemical released on-site (to air, water, underground injection, landfills and other land disposal), and the amount transferred off-site for disposal. When comparing data from year to year, the data is normalized to account for changes in the list of reportable chemicals and other variables.

It is important to note that release should not be directly equated with risk. To evaluate risk, release data must be merged with information about chemical toxicity, site-specific conditions, and exposure. In addition, this data does not indicate whether a facility is violating environmental laws. Many of the substances reported through this program are subject to state and federal regulations designed to protect human health and the environment.

#### **Original Industries**

Manufacturing industries have been reporting their releases since 1987 and federal facilities started reporting in 1994. Nevada's reported releases from these industries increased 7% between 1995 and 1998, and increased 56% in the last 10 years.

In 1998, 52 facilities in the original industries reported 4.2 million pounds of toxic releases. On-site land releases account for 58% of the releases from the original industries and air releases account for about

42% of the releases. About half of the 1998 releases from the original industries are from Kerr McGee Chemical L.L.C., located in Henderson, Clark County.

#### New Information-the 1998 Data

The 43 facilities reporting for the first time in 1998 identified 1.268 billion pounds of releases, or 99.7% of the State's total releases. The new sectors are: metal and coal mining, electricity generation, commercial hazardous waste treatment, solvent recovery, petroleum bulk terminals, and wholesale chemical distributors.

## **Metal Mining**

The new industry with the greatest impact on Nevada releases is metal mining. 36 mines reported 1.263 billion pounds of releases, or 99.3% of the State's total releases. Nevada represents 36% of the nation's metal mining releases. Barrick Goldstrike Mine, with 398 million pounds of releases, ranks 2<sup>nd</sup> in the nation for total releases from any industrial sector. Newmont Gold Twin Creeks Mine, with 270 million pounds of releases, ranks 4<sup>th</sup> in the Nation.

Many mines extract, move, store, process, and dispose of large amounts of waste rock and ore--materials which often contains low concentrations of naturally occurring metals. The vast majority of this material is placed in surface impoundments or on the land, and the metals are reported as on-site releases to land. This previously buried material is exposed to potential leaching by rain, snow, and acid mine drainage, and must be carefully managed and monitored to prevent any surface water or ground-water contamination. There are also air releases from ore processing and metal refining operations.

#### Electricity Generating Facilities

The second largest new sector for releases in Nevada is electricity generation. 4 electricity generating facilities reported 2.9 million pounds of releases. 58% of these releases were to on-site land and 42% were to the air. In Nevada, air releases of acids and the disposal of metal-containing ash to on-site landfills made up the majority of this sector's releases.

Only facilities that combust coal or oil to generate electricity for distribution in commerce need to report to the Toxics Release Inventory. Both coal and oil contain metals that are released to the air when the fuel is combusted. The ash that remains after coal is

combusted also contains metals. Large quantities of this ash may be disposed of in on- or off-site landfills, or returned to coal mines for disposal there. Toxic chemicals may also be formed during the combustion process. These include zinc oxide and acid aerosols like hydrochloric acid, hydrogen fluoride and sulfuric acid.

### <u>Commercial Hazardous Waste Treatment and</u> Solvent Recovery Services

Two commercial hazardous waste treatment facilities reported to the Toxics Release Inventory in Nevada. These facilities reported 1.4 million pounds of releases, the majority (95%) of which was placed in an on-site landfill. Air releases totaled 1,865 pounds.

Hazardous waste treatment facilities treat, store, and dispose of hazardous waste. (Note: the reporting requirements apply only to those facilities regulated by subtitle C of RCRA). Hazardous waste treatment facilities handle large quantities of materials which may contain heavy metals, asbestos and other chemicals. Solvent recovery services collect, recycle, and redistribute solvents. Since many of the facilities are co-located with commercial hazardous waste treatment facilities, their releases were aggregated.

#### Wholesale Chemical Distributors

1 wholesale chemical distributor reported 475 pounds of releases. In the course of distributing chemicals, wholesalers repackage and sometimes reformulate their products, leading to releases of chemicals to the air.

## Petroleum Bulk Terminals and Coal Mining

No facilities reported to the Toxics Release Inventory in Nevada for these industrial categories.

#### **Top Facilities for Releases**

The top 10 facilities for on- and off-site releases in Nevada are:

Barrick Goldstrike Mine (Elko, Elko County) with 398 million pounds

Newmont Gold Company, Twin Creeks Mine (Golconda, Humboldt County) with 270 million pounds BHP Coper Robinson Ops. (Ruth, White Pine

BHP Coper Robinson Ops. (Ruth, White Pine County) with 168 million pounds

Echo Bay Minerals Co - McCoy/Cove Mine (Battle Mountain, Lander County) with 112 million pounds

Newmont gold Co. Carlin South Area (Carlin, Eureka County) with 107 million pounds

Newmont Gold Co. - Lone Tree Mine (Valmy, Humboldt County) with 54 million pounds

Getchell Gold Corp. (Golconda, Humboldt County) with 44 million pounds

Cortez Gold Mines, Pipeline Mine, Mill #2 (Beowawe, Lander County) with 36 million pounds Newmont Gold Co. - Carlin North Area (Carlin, Eureka County) with 25 million pounds

Coeur Rochester Inc. (Lovelock, Pershing County) with 19 million pounds

#### **On-line Access**

For national information on data release, see <a href="http://www.epa.gov/tri">http://www.epa.gov/tri</a>

The TRI data is available through the Envirofacts Warehouse, EPA's premier Internet site for distributing environmental information at <a href="http://www.epa.gov/enviro">http://www.epa.gov/enviro</a>

For general information on the Toxics Release Inventory, including reporting requirements for businesses, go to <a href="http://www.epa.gov/region09/toxic/tri">http://www.epa.gov/region09/toxic/tri</a>

## **Information and Assistance**

We will be more than happy to answer your questions and assist you in learning more about the TRI program in Region 9.

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